A PHASE I ARCHAEOLOGICAL SURVEY OF THE PROPOSED WELLBORN SPECIAL UTILITY DISTRICT NUMBER 2001 PROJECT IN CENTRAL BRAZOS COUNTY, TEXAS

Texas Antiquities Permit Number 2522

By

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Brazos Valley Research Associates

Contract Report Number 80

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Brazos Valley Research Associates

Project Number 01-01

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ABSTRACT

An archaeological survey of a 2200 foot water line and a 1.5 acre pump site in central Brazos County, Texas was conducted in January 2001 by Brazos Valley Research Associates of Bryan, Texas under Texas Antiquities Permit 2522 with William E. Moore the Principal Investigator. The area was investigated by shovel testing and probing. No archaeological sites were found in the project area, and it is recommended that the Wellborn Special Utility District be allowed to proceed with construction as planned. Copies of the report are on file at the Texas Historical Commission; the Texas Archeological Research Laboratory; the Wellborn Special Utility District; and Brazos Valley Research Associates.

ACKNOWLEDGMENTS

The contract for this project was awarded to Brazos Valley Research Associates by the Wellborn Special Utility District. The cooperation of General Manager Stephen Cast throughout the project is appreciated. I am also grateful to the Lili Lyddon for her assistance in the field and for preparing the figures that appear in this report. Ed Baker of the Archeology Division, Texas Historical Commission served as the reviewer for this project.

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INTRODUCTION

Brazos Valley Research Associates was retained by the Wellborn Special Utility District to conduct a 100% Phase I cultural resources survey for the proposed Wellborn Special Utility District Number 2001 Project in central Brazos County (Figure 1). The project area is depicted on United States Geological Survey topographical map Wellborn dated 1961 and photorevised in 1980 (Figure 2). The proposed water line is 2200 feet in length with a permanent easement of 20 feet (1 acre). It begins at Greens Prairie Road, travels overland, and terminates at the site of the proposed pump station at Arrington Road. When converted to acres, the project area is 2.5 acres in size. A 16 inch pipe will be placed in a 24 inch wide trench with an average depth of 5 feet. No federal regulatory agency is involved in this project which was reviewed at the State level by the Archeology Division, Texas Historical Commission. Since a local municipality is financing the construction of this project, an Antiquities Permit was required, and permit number 2522 was assigned to this project.

The route of the proposed water line is on private land, while the site of the proposed pump station is on land owned by the Wellborn Special Utility District. The project area is located on an upland ridge (between 300 and 310 feet elevation) between Spring Creek to the north and Alum Creek to the south.

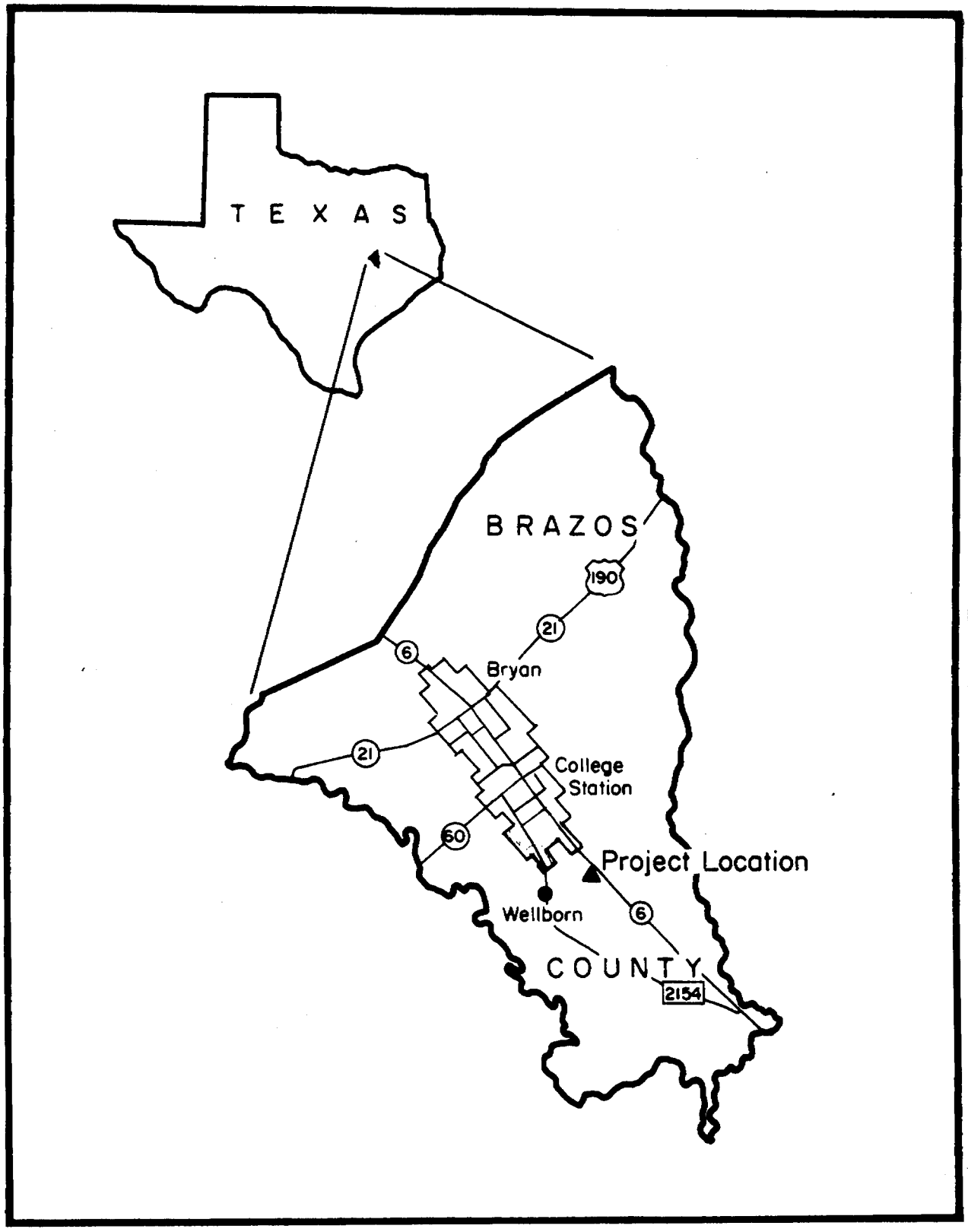

Figure 1. General Location Map.

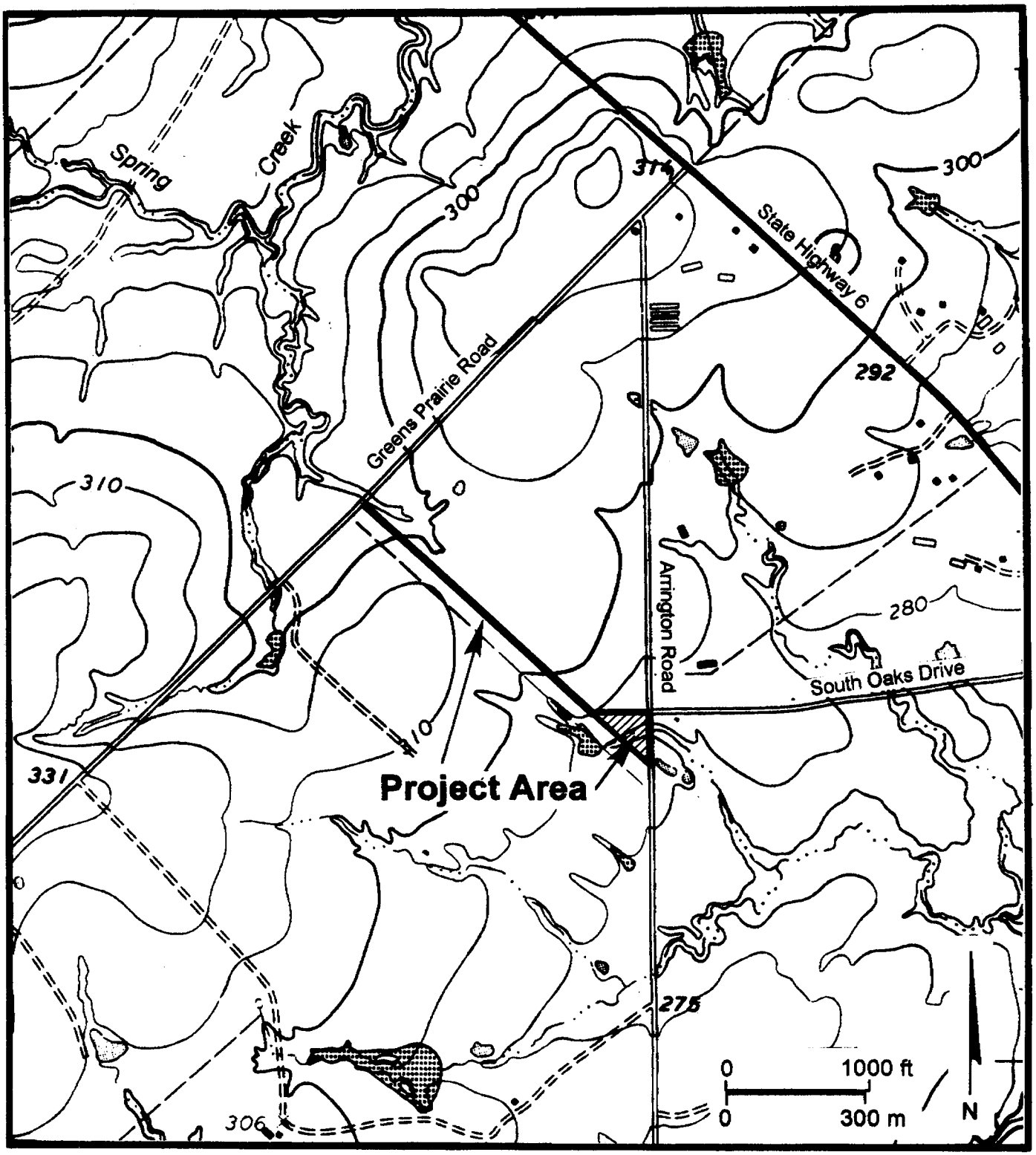

Figure 2. Project Area on Topographic Map.

ENVIRONMENTAL SETTING

The project area is located within the West Gulf Coastal Plain section of the Coastal Plain physiographic province as defined by Fenneman (1938:100-120). This physiographic section is subdivided according to the age of the geological formations (Gulf series) that roughly parallel the Texas coastline. The area is hilly and situated within the East Texas timber belt. Gould (1969) describes it as an area characterized by gently rolling to hilly topography with light colored soils that are acid sandy loams or sands.

The climate is subhumid to humid, and the weather is considered to be predominately warm. Annual rainfall for the county is 39.21 inches. A January minimum temperature of 42 degrees and a July maximum temperature of 95 degrees combine to produce a growing season of 274 days (Kingston and Harris 1983:180). The altitude varies from 200-400 feet.

No soils book is currently available for Brazos County. Soils data were obtained from the local field office of the Natural Resources Conservation Service in Bryan. Specific soil types encountered in the project area are discussed in the *Results and Conclusions* section of this report.

ARCHAEOLOGICAL BACKGROUND

According to a recently published planning document for the Eastern Planning Region of Texas (Kenmotsu and Perttula 1993:Figure 1.1.2), Brazos County is situated within the Southeast Texas archeological study region. In 1985, according to a statistical overview prepared by the Texas Historical Commission (Biesaart et al. 1985:114), Brazos County contained 33 recorded sites. In 1985, 0 sites in the county had been excavated, 0 had been tested by hand, and 33 had been surface collected. Two recorded prehistoric sites in the county were listed as Paleoindian, 1 was listed as General Archaic, and 1 was listed as Late Prehistoric (Biesaart et al. 1985:114). The archaeological potential of Brazos County is reflected in part by the increasing number of recorded sites found as a result of cultural resource management studies. As a result of these investigations, the number of recorded sites now stands at 149 (TARL site files).

A check of the records at the Texas Archeological Research Laboratory in Austin, Texas revealed no archeological sites have been recorded within the current project area. It was discovered that sites have been recorded in the region, and several significant archaeological investigations have been performed in Brazos County. Prehistoric sites in this area are typically found on sandy ridges and uplands in close proximity to dependable sources of water such as creeks and rivers. No prehistoric sites in the county have been reported on clay hills or in active floodplains.

A recent investigation by the Texas Water Development Board in the area resulted in the addition of two previously unrecorded prehistoric sites (41BZ148 and 41BZ149) to the archaeological record (Jurgens 2000). Both sites, located on Carters Creek several miles to the west of the project area, were found in upland topographic settings; one (41BZ148) on a colluvial toe slope, and one (41BZ149) on a ridge top.

Site 41BZ148 consists of a very sparse site in terms of artifact yield. In all, several pieces of burned chert, a chert unifacial edge-modified tool fragment, and a chert secondary flake/chunk were recovered; all in the upper 25 cm of the soil profile. According to Jurgens (2000:18), this indicates a limited use camp. That portion of the site within the area of impact was determined not to be significant. Site 41BZ149 consists of a very sparse site in terms of artifact yield. In all, several chert biface fragments of Edward chert, thick chert tertiary flakes, and chert core fragments were recovered, all in the upper 25 cm of the soil profile. According to Jurgens (2000:19), this indicates a limited use camp. That portion of the site within the area of impact was determined to be not significant.

It is beyond the scope of this report to discuss in detail the archaeological background of Brazos County, especially when numerous contract reports are available. The interested reader is referred to the statistical overview (Biesaart et al. 1985), the planning document published by the Texas Historical Commission (Kenmotsu and Perttula 1993), and the report by Jurgens (2000) for more detailed information regarding the archaeology of Brazos County.

FIELD METHODS

The project area was examined on January 9, 2001 utilizing the pedestrian survey method. The Principal Investigator and a field assistant walked the entire route. All exposed areas were examined for surface indications of prehistoric and/or historic sites. Very little surface exposure was found along the route of the water line; therefore, this area was examined by shovel testing. The 1.5 acre site of the proposed pump station, however, had been disturbed by recent oil field activities (Stephen Cast, personal communication, January 10, 2001). According to Mr. Cast, the soil in this tract had been excavated on at least one occasion and covered with fill that varies in depth between 2 and 5 feet. Shovel probes revealed clay at the surface in some areas and confirmed the soil had been disturbed in other areas. In no part of this tract did the soil appear to be intact. As a result of the various land altering activities there was excellent surface exposure of soils in parts of this tract. A careful surface examination of the surface in this area did not identify any cultural materials.

Originally, it was stated in the permit application that shovel tests would be dug at 30 meter intervals or less along the route of the proposed water line. Once in the field, however, the overall low potential for archaeological sites was identified. This changed the shovel test excavation strategy in that shovel tests were only dug at 30 meter intervals in those areas determined to be high probability for the presence of archaeological sites; that is the higher knolls or hills as opposed to the rather level lower areas which contained very moist surface soils. Shovel tests were dug to clay or bedrock when possible, and the size of each test was 30 centimeters in diameter and varied in depth from 10 to 100 centimeters below the existing ground surface. Some tests were terminated due to roots or saturated soils. All excavated fill was screened through 1/4 inch hardware cloth. Data obtained from shovel testing were recorded on a shovel test log (Appendix I). In all, 11 shovel tests were dug, and each test was backfilled.

RESULTS AND CONCLUSIONS

Examination of the files at the Texas Archeological Research Laboratory in Austin, Texas revealed no sites have been recorded in the project area. There was also no indication that any part of the project area had been surveyed by professional archaeologists. No archaeological sites were found in the project area.

RECOMMENDATIONS

It is the opinion of Brazos Valley Research Associates that there are no archaeological sites within the route of the water line or in the 1.5 acre pump station site. Therefore, it is recommended that construction be allowed to proceed as planned. It is always possible that archaeological sites are missed during any cultural resources survey. Should areas containing prehistoric or historic artifacts not discussed in this report be discovered during construction, Archeology Division, Texas Historical Commission, must be notified immediately and all work stopped in the area of concern until the situation can be evaluated.

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APPENDIX I: SHOVEL TEST LOG

Test	Depth	Results	Comments
01	70 cm	sterile	no gravels, beginnings of clay
02	60 cm	sterile	roots, gravels, very wet soil
03	55 cm	sterile	very wet
04	66 cm	sterile	dug to sandstone
05	52 cm	sterile	wet, roots
06	70 cm	sterile	wet, roots, much gravel
07	52 cm	sterile	roots
08	52 cm	sterile	wet!
09	100 cm	sterile	dry soils, few gravels
10	22 cm	sterile	clay
11	10 cm	sterile	clay (probable fill)